General Inspection Report Page 1

RECEIVED
JAN 20 1984
STATE POLLUTION CONTROL PROGRAM

State of Illinois

Dept. & Div. ILL EPA - MPCP Inspector Gary L Mink (Signature) Date Inspected 11/22/83

Mine Name FIDELITY II Mine Company FREEMAN UNITED COAL COMP

IEPA Permit No. AWAITING ISSUANCE OF NPDES PERMIT M & M Permit No. _____ County PERRY

General Location 5 MILES WEST OF DU QUOIN

Arrival Time 11:15A Weather Conditions CLOUDY WET LIGHT WIND

RECLAMATION TYPE (Check Appropriate Type)
Mine Includes Prime Land ___Yes/___No
Steep Slope Rule Applies ___Yes/___No
Coal Preparation ___Yes/___No
Not Applicable ___

Reason for Visit: ROUTINE

Persons Contacted:

BILL SMITH - PERMIT MGR

GLEN HAMILTON - REC SUP.

☐ TEMPORARY REPORT
☒ FINAL REPORT

PARAMETER CHECKLIST

1. Availability of: A___permits B___Plans

2. Imminent Danger to Public Health and Safety___

3. Significant Imminent Environmental Harm___

4. Signs and Markers: A. mine entrance B. perimeter C. blasting D. topsoil E. perimeter observance 1. 100' zone 2. 300' zone F. permit area correlation G. not investigated H. not applicable

(5.) Disposal Spoil and Waste Material Outside Pit or Direct Cast Site: A. gob disposal: 1. site capacity 2. covering 3. vegetation B. within permit area C. site approved D. slope of site E. steep slope rules F. valley fill or head of hollow fills: 1. permit area 2. location near ridge top 3. fill design 4. fill construction 5. steep slope rules 6. under drains 7. lateral drains 8. controlled placement 9. engineer inspection (G.) not investigated H. not applicable

6. Soil Handling: A. removal before other disturbance B. storage C. protection D. thickness E. root medium F. other overburden G. toxic material handling H. root medium satisfactory for top soil replacement (slope, thickness, texture) I. topsoil replaced J. grading current K. rills and gullies L. erosion control systems M. timely revegetation and mulching (N.) not investigated O. not applicable

7. Prime Land: A. prime land determination B. soil horizon removal prior to other disturbance C. thickness removed D. approved horizon storage E. protection of stockpiles F. horizon replacement and thickness G. protection of replaced horizons H. grade (I.) not investigated J. not applicable

8. General Water Quality and Hydrology: ~~(A.)~~ waterways B. grading C. vegetation D. toxic material E. horizontal bore holes (F.) sediment ponds: 1. size 2. structure 3. spillway 4. clean out 5. over 20' high or over 20 acres foot storage (___yes/___no) 6. seepage 7. structural weakness 8. discharge structure 9. chemical treatment system 9(a). permitted ___yes/___no ~~(G.)~~ discharge water quality H. buffer zone (100') observance I. zone markers (J.) NPDES permits required ✓yes/___no K. water quality L. not investigated M. not applicable

cc: Dept. of Mines and Minerals

(5/02/80)

9. Stream Channel or Other Water Diversion: (A) temporary or permanent B. size adequacy C. stability D. gradient E. grade stability F. suspended solids G. sediment control H. channel design I. erosion control structures J. fish and wildlife protection K. vegetation L. removal of temporary structures M. structure removal procedures N. not investigated O. not applicable

10. Road Hydrology: (A) culverts B. ditches C. location choice D. grade E. stream closeness F. ditch relief drains G. out slope drains H. construction material ___toxic/___non-toxic I. maintenance J. railroad spur hydrology K. vegetation L. not investigated M. not applicable

11. Impoundment Structures: A. M.H.S.A. construction observance B. coal waste in structure (C.) freeboard (D.) stability (E.) seepage F. engineer inspection G. dam marker H. maintenance I. ditch and spillways J. changes in geometry of structure K. not investigated L. not applicable

12. Steep Slope Procedure: A. spoil on outslope B. debris C. highwall removal D. disturbance above highwall E. excess spoil F. instability of spoil and woody material G. not investigated (H.) not applicable

13. Preparation Plant: (A.) yes: 1. permitted ✓yes/___no (2.) closed water system ___yes/✓no 3. discharge potential ___yes/___no B. no, raw coal shipped C. not investigated

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LEGEND: ◯= parameter inspected: ∅= comment or question on the parameter

NOTE: Items circled were considered during this investigation. If nothing under a major item was investigated, circle either "not investigated" or "not applicable". Violation means violation or apparent violation

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___NO VIOLATIONS FOUND ___SEE ATTACHMENT

Indicated Parameter			Comments Or Action Taken
	Check Column		
No.	Violation	Non-Violation	
GEN Comm.		✓	
8A		✓	
8G		✓	
8J		✓	
9A		✓	
10A		✓	

ATTACHMENT

Freeman United Coal Mining Company
Fidelity #11
November 11, 1983

GENERAL COMMENTS: During the investigation, I was accompanied by Glen Hamilton, Reclamation Supervisor for the subject site. Mr. Hamilton and I observed that the stainless steel pump has been installed to pump water out of the "moat", surrounding the gob pile, into the slurry circuit. Water from the moat flowed into the old slurry area which last spring overflowed the berms causing an unauthorized discharge and a large breach in the berm. The breach in the old slurry area has been repaired and with the new pumping system, another berm overflow appears remote.

8. A.: The drainageway which receives discharge waters from proposed discharge 005 has received additional rip-rap so as to stabilize the soil on the adjoining channel slopes.

8. G.: During the investigation, I obtained some effluent samples and prepared and shipped them to the Agency's Champaign Regional Office laboratory for analysis. The results of the analyses are listed below:

Sample #1: obtained from the "catwalk" of discharge 002. The pond was discharging at an undetermined rate (greater than 200 gpm) and the water sample appeared clear.

LAB. #B021125

T. Iron	0.8 mg/l	Suspended Solids	11 mg/l
Manganese	0.37 mg/l	pH	8.0
Sulfate	1825 mg/l	Alkalinity	218 mg/l
Conductance	3100 mg/l	T. Acidity	0 mg/l

Sample #2: obtained from the spillway area of proposed discharge 005. The pond was discharging at approximately 50 gpm. and the water sample appeared clear.

LAB. #B021126

T. Iron	0.4 mg/l	Suspended Solids	10 mg/l
Manganese	0.5 mg/l	pH	8.1
Sulfate	1010 mg/l	Alkalinity	195 mg/l
Conductance	2140 mg/l	T. Acidity	0 mg/l

8. J.: This site is operating under a proposed Construction Authorization. Due to an operations modification, the issuance of the site's NPDES permit may be delayed. Note: All Discharge Monitoring Reports have been submitted in accordance with the reporting schedule contained in the former NPDES Permit ILO035840) which expired September 30, 1979.

9. A.: I observed the temporary water diversion along the southeast section of the site. The water diversion collects surface runoff and receives pit pumpage from the eastern portion of the site and directs it to the southernmost sedimentation pond (proposed Discharge 005).

10. A.: I discussed with Mr. Hamilton the need for keeping the road culverts clear of branches and other foreign materials so as to prevent any water from backing up.

Gary L Minton

Gary L. Minton
Environmental Protection Agency

GLM:mgg
01/13/84
cc: Dept. of Mines and Minerals
MPCP/Records Unit
MPCP/Field Operations Section

SAMPLE #1

WATER QUALITY MINE ID ~~WASTE TREATMENT WORKS~~ EFFLUENT SAMPLING FORM
ENVIRONMENTAL PROTECTION AGENCY

SAMPLE COLLECTED BY: GARY L. MINTON

SAMPLING LOCATION: FIDELITY #11 DISCH 002

BASIN/SUB-BASIN: BIG MUD / BOUCOUP CR TRIBUTARY: PANTHER CREEK

CARD COL. 1 1 CARD NO. 1 CARD COL. 1 2

FOR LABORATORY USE ONLY

SAMPLE RECEIVED BY MV

DATE REC'D NOV. 27 1983 TIME REC'D 10A AM PM

DATE ANALYSES COMPLETED

DATE RESULTS FORWARDED JAN 3 1984

TOTAL TESTS REQUESTED TESTS RUN

LAB SECTION CHAMPAIGN SUPERVISOR

CARD COL. 1 3 CARD NO. 2 CARD NO. 3

2 - 5 BASIN CODE	6 - 7 PLANT OR STATION NO.	8 - 10 FIPS COUNTY CODE (USE ONLY FOR PLANTS)
11 - 17 B021125 LAB ID NO.	11 - 17 B021125 LAB ID NO.	11 - 17 LAB ID NO.
18 T SAMPLE TYPE CODE (SEE LIST BELOW)	18 T SAMPLE TYPE CODE	18 T SAMPLE TYPE CODE B021125
19 - 20 83 YEAR	ARSENIC 19 - 22	PLANKTON (NO/ML) 19 - 23
21 - 22 11 MONTH	BARIUM 23 - 25	FLUORIDE 24 - 26
23 - 24 22 DAY	BORON 26 - 28	CHLORIDE 27 - 30
25 - 26 01 HOUR (NEAREST)	CADMIUM 29 - 32	SULFATE 31 - 34 1825
27 P TIME OF DAY (A.P.N.)	CHROMIUM (HEX) 33 - 35	TOTAL SULFUR 35 - 38
28 - 30 WATER TEMPERATURE (DEG. F.)	CHROMIUM (TRI) 36 - 38	OIL 39 - 42
31 - 33 FIELD D.O.	CHROMIUM 39 - 41	M.B.A.S. 43 - 46
PH (UNITS) 34 - 36 8.0	COPPER 42 - 45	CARBON CHLOROFORM EXTRACT 47 - 50
TOTAL PHOSPHORUS 37 - 40	CYANIDE 46 - 49	TURBIDITY (UNITS) 51 - 54
AVG. BOD. 41 - 44	IRON (T) 50 - 53 0.8	RESIDUE ON EVAP. 55 - 58
C.O.D. 45 - 48	IRON (DISSOLVED) 54 - 56	VOLATILE SUSP. SOLIDS 59 - 62
~~PHENOLS~~ 49 - 52	LEAD 57 - 60	COLOR (UNITS) 63 - 65
CONDUCTANCE 53 - 59 3100. FEC COL (#/100ML)	MANGANESE 61 - 63 0.37	HARDNESS 66 - 68
AMMONIA N 60 - 63	MERCURY (MICRO GM/L) 64 - 66	ALKALINITY 69 - 71 218
NITRATE + NITRITE AS N 64 - 66	NICKEL 67 - 69	TOTAL ACIDITY 72 - 74 0 To pH 8.2 3+0
ORGANIC N 67 - 69	SELENIUM 70-72	FREE ACIDITY 75 - 77
TOTAL N 70 - 72	SILVER 73 - 76	OTHER TESTS REQUIRED ☐ YES (REFERENCE REVERSE SIDE) ☐ NO
T.D.S./ E.C. 73 - 76	ZINC 77 - 79	
TOTAL SUSP. SOLIDS 77 - 80 11	ALL RESULTS EXPRESSED AS MG/L EXCEPT WHERE OTHERWISE STATED.	

SAMPLE TYPE CODES:
A = DOMESTIC WASTE ONLY
E = INDUSTRIAL WASTE ONLY
I = MIXED DOMESTIC & INDUSTRIAL WASTE
S = STREAM, LAKE, OR RECEIVING WATER
T = MINE DRAINAGE OR WASTE
X = OTHER OR TYPE UNKNOWN

SIGN BELOW FOR EFFLUENT SAMPLE

TRANSPORTED BY G Minton

RECEIVED BY

DATE REC'D TIME REC'D AM PM

TRANSPORTED BY

RECEIVED BY

DATE REC'D TIME REC'D AM PM

Gage Height (or top of ice) or R.P. to W.S.:

Sampling Techniques: GRAB

Flow conditions (velocity etc.) UNK - GREATER THAN 200 GPM

Identification Nos on pH and Sp. Cond. meters:

Weather Conditions: WARM CLOUDY WET LIGHT WIND

Comments and unusual conditions (indicate severity): WATER SAMPLE CLEAR

WPC-129 REV. 3/78

SAMPLE #2

WATER QUALITY ... WASTE TREATMENT WORKS EFFLUENT SAMPLING FORM
ENVIRONMENTAL PROTECTION AGENCY

IRVINE

SAMPLE COLLECTED BY: GARY L. MINTON

SAMPLING LOCATION: FIDELITY #11 — PROPOSED POND 005

BASIN/SUB-BASIN: BIG MUDDY/BOUCOUP CREEK | TRIBUTARY: YOUNGS CREEK

CARD COL. 1 1 CARD NO. 1 | CARD COL. 1 2

FOR LABORATORY USE ONLY

SAMPLE RECEIVED BY [illegible]

DATE REC'D NOV. 2, 1983 TIME REC'D 10A AM PM

DATE ANALYSES COMPLETED

DATE RESULTS FORWARDED JAN 3 1984

TOTAL TESTS REQUESTED ____ TESTS RUN ____

LAB SECTION CHAMPAIGN SUPERVISOR [illegible]

CARD COL. 1 3 CARD NO. 2 | CARD COL. 1 3 CARD NO. 3

2 - 5 NCCA BASIN CODE	6 - 7 ____ PLANT OR STATION NO.	8 - 10 ____ FIPS COUNTY CODE (USE ONLY FOR PLANTS)
11 - 17 B021126 LAB ID NO.	11 - 17 B021126 LAB ID NO.	11 - 17 B021126 LAB ID NO.
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19 - 20 83 YEAR	ARSENIC 19 - 22	PLANKTON (NO/ML) 19 - 23
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23 - 24 22 DAY	BORON 26 - 28	CHLORIDE 27 - 30
25 - 26 02 HOUR (NEAREST)	CADMIUM 29 - 32	SULFATE 31 - 34 1010
27 P TIME OF DAY (A.P.N.)	CHROMIUM (HEX) 33 - 35	TOTAL SULFUR 35 - 38
28 - 30 WATER TEMPERATURE (DEG. F.)	CHROMIUM (TRI) 36 - 38	OIL 39 - 42
31 - 33 FIELD D.O.	CHROMIUM 39 - 41	M.B.A.S. 43 - 46
PH (UNITS) 34 - 36 7.1	COPPER 42 - 45	CARBON CHLOROFORM EXTRACT 47 - 50
TOTAL PHOSPHORUS 37 - 40	CYANIDE 46 - 49	TURBIDITY (UNITS) 51 - 54
AVG. BOD. 41 - 44	IRON (T) 50 - 53 0.4	RESIDUE ON EVAP. 55 - 58
C.O.D. 45 - 48	IRON (DISSOLVED) 54 - 56	VOLATILE SUSP. SOLIDS 59 - 62
~~PHENOLS 49 - 52~~	LEAD 57 - 60	COLOR (UNITS) 63 - 65
CONDUCTANCE 2140. 53 - 58 FEC COL (#/100ML)	MANGANESE 61 - 63 0.50	HARDNESS 66 - 68
AMMONIA N 60 - 63	MERCURY (MICRO GM/L) 64 - 66	ALKALINITY 69 - 71 195
NITRATE + NITRITE AS N 64 - 66	NICKEL 67 - 69	TOTAL ACIDITY 72 - 74 0
ORGANIC N 67 - 69	SELENIUM 70-72	FREE ACIDITY 75 - 77 To pH 8.2 0
TOTAL N 70 - 72	SILVER 73 - 76	OTHER TESTS REQUIRED ☐ YES (REFERENCE REVERSE SIDE) ☐ NO
T.D.S./ E.C. 73 - 76	ZINC 77 - 79	
TOTAL SUSP. SOLIDS 77 - 80 10	ALL RESULTS EXPRESSED AS MG/L EXCEPT WHERE OTHERWISE STATED.	

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X = OTHER OR TYPE UNKNOWN

SIGN BELOW FOR EFFLUENT SAMPLE

TRANSPORTED BY GARY MINTON

RECEIVED BY ____

DATE REC'D ____ TIME REC'D ____ AM PM

TRANSPORTED BY ____

RECEIVED BY ____

DATE REC'D ____ TIME REC'D ____ AM PM

Gage Height (or top of ice) or R.P. to W.S.: ____

Sampling Techniques: GRAB

Flow conditions (velocity etc.) 50 GPM

Identification Nos on pH and Sp. Cond. meters: ____

Weather Conditions: WARM CLOUDY, WET

Comments and unusual conditions (indicate severity): WATER SAMPLE CLEAR

WPC-129 REV. 3/78